

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 6958

Petition and tariff filing of Green Mountain Power Corporation re: proposed rate design changes to take effect January 1, 2005	)	
	)	Hearings at
	)	Montpelier, Vermont
	)	December 6 and 7, 2004
	)	

Order entered: 10/21/2005

PRESENT: George E. Young, Hearing Officer

APPEARANCES: Peter H. Zamore, Esq.  
Sheehey Furlong & Behm P.C.  
for Green Mountain Power Corporation

Geoffrey Commons, Esq.  
for the Vermont Department of Public Service

Leonard H. Singer, Esq.  
Couch White, LLP  
for International Business Machines Corporation

Gregg H. Wilson, Esq.  
Kolvoord, Overton & Wilson  
for International Business Machines Corporation

James A. Dumont, Esq.  
for AARP

Sandra Levine, Esq.  
for Conservation Law Foundation

David F. Kelley, Esq.  
for Vermont Ski Areas Association

I. Introduction .....	2
II. Procedural History .....	3
III. Findings and Discussion .....	4
A. GMP's Proposal .....	4
B. Allocation of Capacity Costs .....	7
C. Allocation of Administrative and General Costs .....	10
D. Allocation of Secondary Distribution Costs .....	13
E. The Customer Charge for Rate 01 .....	15
F. Special Charges .....	19
G. Proposed Efficiency Block .....	21
H. Proposed Riders .....	25
I. Load Control for Small Loads .....	29
J. Alternative Rate Designs .....	30
K. The Energy Efficiency Charge Exemption .....	32
L. Rate 63 Transition .....	36
M. Implementation of Rate Design .....	36
IV. Conclusion .....	37
V. Board Discussion .....	38
VI. Order .....	47

### **I. INTRODUCTION**

In this proceeding, the Public Service Board ("Board") considers changes Green Mountain Power Corporation (the "Company" or "GMP") has proposed to its rate design. To a large degree, the proposed rates are similar to the existing rates. GMP also proposes to introduce several new tariff provisions, such as the curtailable load and critical peak riders, that incorporate into tariffs services that GMP had previously offered through special contracts. AARP, the Conservation Law Foundation ("CLF"), and the Vermont Department of Public Service ("Department") have all raised concerns with certain aspects of GMP's proposed rate design revisions.

This Proposal for Decision recommends that the Board largely accept GMP's proposed rate design. However, the evidence presented by the parties leads me to recommend that the Board modify GMP's rate design in the following ways: (1) allocate capacity costs based upon the "12 CP" method; (2) reject the proposed "efficiency block" that establishes a declining block

rate; (3) reduce the customer charge for residential Rate 01; and (4) deny GMP's request that the Board exempt International Business Machines Corporation ("IBM") from paying the Energy Efficiency Charge ("EEC") on power served under the efficiency block.<sup>1</sup>

## **II. PROCEDURAL HISTORY**

On March 26, 2004, GMP filed a petition for a rate redesign. The petition included proposed tariff changes and several new riders, which the Company proposed would be effective on January 1, 2005.<sup>2</sup> GMP filed its proposed tariff changes in compliance with a provision of the Board's December 22, 2003, Order in Docket 6867, which provided as follows:

Within sixty days of the date of this Order, Green Mountain shall file with the Board a fully allocated cost-of-service study and rate redesign as well as a petition, pursuant to 30 V.S.A. §§ 218 and 225 and Board Rule 2.402, to redesign its rates. This rate redesign shall address the extent to which special contracts in general, and the IBM EDA in particular, can be provided in Green Mountain's tariffs, instead of through special contracts.<sup>3</sup>

On April 26, 2004, the Department recommended to the Board that the proposed tariff changes be suspended and investigated. In response, the Board issued an order on May 13, 2004, suspending the filing, opening an investigation and scheduling a prehearing conference.<sup>4</sup>

The Board granted intervention on a permissive basis to IBM, Vermont Ski Areas Association ("VSAA") and AARP on June 15, 2004.<sup>5</sup> The Board further granted permissive intervention to CLF on July 1, 2004.<sup>6</sup>

I convened evidentiary hearings in Montpelier on December 6 and 7, 2004. Subsequent to the close of hearings (by letter dated January 10, 2005), the Company filed updated proposed

---

1. This final issue is moot if the Board decides not to implement GMP's proposed efficiency block as I recommend.

2. Petition at 1, 5.

3. Investigation into Memorandum of Understanding between Green Mountain Power Corporation and Vermont Department of Public Service, Docket No. 6867, Order of 12/22/04 at 43. Although the Board's Order required that GMP file the petition by February 20, 2004, on February 19, 2004, the Board granted the Company's Motion to Extend the Deadline for filing the rate redesign until March 26, 2004. Memorandum of Susan M. Hudson, Clerk of the Board, dated February 19, 2004.

4. Order Suspending Rate Design Filing and Notice of Prehearing Conference, dated May 13, 2004.

5. Prehearing Conference Memorandum, dated June 15, 2004.

6. Order re: Motion to Intervene, dated July 1, 2004.

tariffs, incorporating changes to the cost allocation, rate elements and tariff language identified by the Company subsequent to the initial filing in March 2004.<sup>7</sup>

Pursuant to 30 V.S.A. § 8, and based on the record and evidence, I present the following findings of fact and conclusions of law to the Board.

### **III. FINDINGS AND DISCUSSION**

#### **A. GMP's Proposal**

##### **1. Findings**

1. Rate design involves two steps. First, utility costs are allocated to customer classes to ensure a fair division of costs among customers and to yield the appropriate total revenue. Second, tariffs are designed to be practical, unambiguous, stable over time, without undue discrimination and to provide efficient price signals. Steinhurst pf. at 2; Weiss pf. at 3.

2. Rates charged to customers create incentives that have a significant impact on how much, and when, electricity is consumed. Weiss pf. at 4.

3. GMP's proposed tariff changes are based on a Fully Allocated Class Cost of Service Study ("FACCSS") that allocates the Company's costs to the various rate classes on a cost-causation basis. Brown pf. at 1–2; exh. GMP-JWB-1.

4. The FACCSS was based on the revenue requirement approved by the Board in the Company's last rate case (Docket 6867). GMP designed the proposed rates to generate the same revenues, when applied to 2002 billing determinants, as the currently-effective rates applied to the same billing determinants, except that the billing determinants for the efficiency block were estimated, because the efficiency block is not contained in the current tariffs. As a result, any changes reflected in the FACCSS affect cost allocation but do not result in a rate increase relative to current rates. Tr. 12/6/04 at 69–72 (Brown); Brown pf. at 3.<sup>8</sup>

5. Once costs were assigned to each rate class, GMP established the individual rate elements in the proposed tariffs for each class in the following manner. For rate classes without a demand charge, the change in revenue requirements was assigned to the energy charge and the

---

7. Letter from Peter H. Zamore to Clerk dated January 10, 2005. These changes corrected errors or reflected revisions to which Green Mountain agreed during the evidentiary hearings.

8. GMP performed manual adjustments to account for the fact that certain credits are not included in the standard billing determinants. These include the credits provided for transformers the water heater credit provided under Rate 02. Tr. 12/6/04 at 106–108 (Brown).

customer charge was not changed. For rate classes with a demand rate, GMP (1) based the energy charges on the market cost of energy plus ancillary service, transmission and losses, (2) based the off-peak demand rate on applicable embedded transmission and distribution costs and (3) residually priced the peak demand charge. Brown pf. at 5; tr. 12/6/04 at 44–45 (Brown).

6. Because certain Rate 63 customers will experience significant rate increases under GMP's proposal, the Company has also proposed to phase in increases for a period of up to three years, for Rate 63 customers whose rates are expected to increase by more than 10%. Brown pf. at 5.

## 2. Discussion

In this proceeding, the Board considers a proposed new rate design from GMP. The rate design uses GMP's revenue requirement from Docket 6867 as the baseline, although GMP submitted an amendment after the close of hearings based upon GMP's 1.9 percent rate increase that the Board allowed to take effect in Docket 7030. The proposed rate design is intended to be revenue neutral, producing no change in overall revenues. To achieve this result, it uses the billing determinants from 2002 (which also underlie the rates reviewed in Docket 6867).

GMP's proposal is based upon a fully allocated cost of service study by which GMP assigns the total costs of the Company to each of the rate classes. This cost assignment is based upon the principle of cost-causation. To allocate these costs, GMP employs 112 factors.<sup>9</sup> For most customers (and customer classes), the difference in the relative class costs are relatively small. For example, residential rates in Rate classes 01/02 decrease by approximately 0.68 percent, while general service under rate class 06 decreases by 0.52 percent.<sup>10</sup> After the allocation to each of the rate classes, GMP's proposal assigns the revenues to the customer charge and energy charge (for rate classes without a demand charge) and among the customer charge, demand charge, and energy charge (for other rate classes).

The Company's proposed tariffs vary from the existing tariffs in several ways:

- GMP proposes to terminate Rate 02, under which the customer receives a monthly credit of \$2.50 in exchange for permitting the Company to interrupt service to the

---

9. Exh. GMP-JWB-1A.

10. Brown pf. at 2–3.

customer's electric water heater, because the ripple control system used to interrupt service is no longer functioning properly and replacement equipment is unavailable.

- GMP introduces a stepped rate (referred to as the "efficiency block") into the peak energy charges for Rates 63 (C&I Time of Use) and C&I Transmission Service, with energy available at a lower rate to the extent the customer's load factor exceeds 65%.
- GMP proposes to increase the minimum power factor from 90% to 95% for Rate 63 (98% for C&I Transmission Service), to reflect anticipated increases in power factor requirements imposed by the Vermont Electric Power Company ("VELCO").
- GMP proposes new riders for Rate 63, intended to reflect programs currently provided through special contracts. These include its programs relating to economic development agreements ("EDAs"), interruptible and dispatchable load (replaced with a curtailable load rider), the Independent System Operator ("ISO") demand response initiative and other programs. In addition, GMP proposed a new critical peak rider, providing for discounted peak demand and energy charges, but much higher charges during hours identified by the Company as critical peak hours.
- GMP proposes to increase special charges for customer-specific work, such as initiation of service, to reflect current costs.<sup>11</sup>

As described in more detail below, AARP, CLF, and the Department raised concerns with one or more aspects of the Company's proposal. The issues raised by the parties relate to the following: (1) allocation of administrative and general costs; (2) allocation of certain secondary distribution costs; (3) allocation of capacity costs; (4) the level of the customer charge; (5) the proposed efficiency block; (6) the Company's riders (in particular the EDA riders); (7) special charges; (8) inclining block rates; (9) load control for small loads; (10) real time pricing; (11) seasonal rates; and (12) the EEC exemption. Each of these are addressed in the following sections.

In addition, the Department raised several technical issues concerning the FACCSS. The DPS recommended that the Company use only projected 2005/2006 wholesale costs, rather than also using 2004 costs as the Company had proposed.<sup>12</sup> The Department also adjusted the rate-base portion of the FACCSS to more appropriately reflect Vermont Yankee rate base.<sup>13</sup> The Department recommended further changes to the FACCSS submitted in connection with the

---

11. Brown pf. at 5–8.

12. Berry pf. at 7-8; Brown reb. pf. at 8.

13. Berry pf. at 6; Brown reb. pf. at 8.

Company's rebuttal testimony.<sup>14</sup> GMP did not object to any of these recommendations and reflected them in its revised FACCSS.<sup>15</sup>

## **B. Allocation of Capacity Costs**

The largest component of GMP's cost of service is power costs. These encompass payments associated with obtaining sufficient capacity to serve customers, as well as payment for the actual energy used by GMP's customers. The parties do not dispute the methods by which GMP allocates its energy costs among the customer classes. Capacity costs present a more difficult question, since, as the Board has found previously, some demand costs are incurred for the purposes of saving energy costs and thus, are more properly recovered through energy charges.<sup>16</sup> For example, base-load power plants have lower energy costs, but higher demand costs, whereas peaking power plants tend to have low demand costs and higher energy costs. In the past, the Board has used what is known as the fuel offsets approach to capture this distinction by essentially assuming that the demand costs in excess of those attributable to a peaking unit are all that should be allocated to the demand component and that higher demand costs are really incurred to reduce energy costs. Here, both the Department and GMP recommend that the Board employ the fuel-offset methodology to the assignment of capacity and energy costs. GMP and the Department disagree, however, on the specific methodology to be used (although both acknowledge that the difference in results from the two methodologies is relatively small at the present time).

### **1. Findings**

7. GMP's FACCSS employs a fuel offset methodology for assigning capacity and energy costs, which is based on the premise that certain demand costs are incurred to save energy costs and therefore should be assigned on the basis of energy consumption. Brown pf. at 3.

8. The Company's FACCSS allocates marginal capacity costs based on each class' contribution to the twelve monthly coincident peaks and marginal energy costs on the basis of

---

14. Berry surr. pf. at 3-5 (revised inputs into the FACCSS concerning Vermont Yankee and wholesale cost update), 5-6 (update 2003 pro forma values to 2004), 7 (63 billing determinant discrepancy).

15. Brown reb. pf. at 8; exh. GMP-JWB-7; tr 12/6/04 at 19 (Brown); GMP Reply Brief at 1-2.

16. Brown pf. at 3.

each class' energy consumption during specific sub-annual costing periods. The remaining capacity and energy costs are allocated based on the combined allocation of marginal capacity and energy costs. Exh. GMP-JWB-1; tr. 12/6/04 at 76-77 (Brown); Brown pf. at 4.

9. The primary difference between the FACCSS GMP employed here and the cost-allocation methodology used in the Company's last fully-litigated rate design case (Docket 5744) is that in the last case, capacity costs were allocated using the peaker-substitution method. Under the peaker-substitution method, capacity costs above the marginal cost of capacity are assigned on the basis of energy consumption. *Id.* at 4.

10. GMP's proposed method allocates 2/3 of the capacity costs in excess of the marginal cost of capacity in the same manner as the Board authorized in GMP's last rate case. The remaining 1/3 of the costs are allocated in the same manner as capacity costs. Tr. 12/6/04 at 76-77 (Brown).

11. The 12 CP Peaker Substitution method determines marginal production capacity costs by multiplying the annual per-kilowatt cost of a peaking unit by the system's peak load plus reserves. It then allocates these capacity costs to each customer class based upon the average of the percentages of each customer class's share of the 12 monthly system peaks in a year. Under the peaker-substitution method, all remaining embedded capacity costs (which represent the costs above the cost of a peaking unit) are allocated among the customer classes on the basis of each classes' energy consumption. Brown pf. at 4; Berry pf. at 3.

12. GMP is experiencing a slow rate of growth in peak demand, so that any addition to production capacity is likely to be a generator that is designed to supply a relatively small amount of capacity. The capacity cost of a small peaking generator thus represents a reasonable measure of marginal capacity costs. Brown pf. at 3.

13. There is no rational basis to conclude that the \$6.6 million difference between marginal and embedded capacity costs includes costs that are not associated with reducing energy costs. Berry surr. pf. at 2.

14. Over 60 percent of GMP's embedded capacity costs are associated with the Hydro-Quebec contract and lead directly to lower energy costs. Berry surr. pf. at 2.

15. Assignment of capacity costs using the 12 CP Peaker methodology is appropriate for establishing GMP's rate design. Findings 7-14, above.



16. For GMP, the difference between embedded and marginal capacity costs should be allocated on the same basis as energy costs. Berry pf. at 3.

## 2. Discussion

GMP's fuel offset method assigns the difference between average and marginal power costs on the basis of marginal energy and demand costs.<sup>17</sup> GMP takes the position that this allocation methodology is appropriate because average costs exceed marginal costs and because not all of the capacity costs above marginal capacity costs were incurred to save energy costs. This methodology is based on the premise that the difference between marginal and average power costs is attributable to a number of factors, including investment in more expensive capacity to save energy costs (fuel offsets) and historic power purchase commitments made at times when the market price of power was higher than today.<sup>18</sup>

The Department proposed an assignment based on the peaker method, which assigns the difference between average and marginal capacity costs based on the assignment of energy costs.<sup>19</sup> The Department maintains that a small, peaking generator is a reasonable source of marginal capacity for GMP, particularly since it is experiencing a slow rate of growth and will likely need small incremental amounts of capacity.<sup>20</sup> In addition, the Department points out that utilities procure production capacity to meet their peak loads, thus assigning the costs based upon peak demand characteristics through the demand charge is logical.<sup>21</sup> Accordingly, the Department proposes to allocate the difference between marginal and embedded production capacity costs.

For two reasons, I recommend that the Board accept the Department's proposal to use the 12 CP Peaker Substitution methodology to allocate capacity costs. First, this methodology is consistent with the Board's decision on GMP's rate design in Docket 5744. At that time, the

---

17. Brown reb. pf. at 7–8.

18. Brown pf. at 4

19. Berry pf. at 2-5; Berry surr. pf. at 1-2; Brown reb. pf. at 7; tr. 12/6/04 at 75-77 (Brown); tr. 12/7/04 at 133 (Berry).

20. Berry pf. at 3.

21. Berry pf. at 3.

Board found that the method "achieves a fair and reasonable allocation of costs based upon the evidence before us."<sup>22</sup> The evidence supports the same conclusion here.

In addition, the evidence shows that the main difference between the methodologies proposed by GMP and the Department is the manner in which the difference between marginal and embedded capacity costs are allocated. The Department proposes allocating all of these costs in the same manner as energy costs, whereas GMP's approach allocates 1/3 of these costs in the same manner as capacity costs.<sup>23</sup> GMP's approach is based upon the assumption that not all of these costs in excess of marginal costs were incurred for the purposes of avoiding energy costs and that, therefore, it is reasonable to assign a portion in the same manner as other capacity charges.<sup>24</sup>

GMP did not, however, present evidence demonstrating the validity of its assumptions. As the Department points out, it is impossible to determine *which* costs are in excess of marginal costs, since all costs are incurred simultaneously.<sup>25</sup> Thus, there is no rational basis to conclude that the \$6.6 million difference between marginal and embedded capacity costs includes costs which are not associated with reducing energy costs. In addition, the evidence shows that over 60 percent of GMP's embedded capacity costs are associated with the Hydro-Quebec contract and lead directly to lower energy costs.<sup>26</sup> The evidence in the record does not identify the other components of GMP's embedded capacity costs, but it is reasonable to assume that portions of other sources (particularly baseload units) have similar characteristics. Considering the large portion of the embedded capacity costs that are known to be associated with reducing energy costs and the absence of any evidence of particular capacity cost components that are unrelated to reducing such energy costs, I find no basis in the record to support GMP's rationale.

### **C. Allocation of Administrative and General Costs**

#### **1. Findings**

17. GMP assigned administrative and general ("A&G") costs on the basis of the number of customers in each class, weighted by the relative amount of customer service needs of each class.

---

22. Docket 5744, Order of 12/2/94 at 8, n.6.

23. Tr. 12/6/04 at 76-77 (Brown).

24. Brown reb. pf. at 7-8.

25. Berry surr. pf. at 2.

26. Berry surr. pf. at 2.

To reflect these relative needs, each commercial and industrial customer received 3.5 times the weighting of a residential customer; the transmission-class customer was weighted at 35 times the per-customer residential weighting. Brown reb. pf. at 4; exh. GMP-JWB-4.

18. Two-thirds of the A&G cost category relates to salaries and benefits, and the majority of these costs relate to customer service and accounting functions (including meter reading and billing); other A&G costs relate to information technology, accounting and finance. Brown pf. reb. at 4; exh. GMP-JWB-4; tr. 12/6/04 at 80 (Brown); tr. 12/7/04 at 25-26 (Steinhurst).

19. The costs included in the A&G account are largely driven by the number of customers, although larger-use customers typically impose greater costs than low-use customers. Brown pf. reb. at 4; exh. GMP-JWB-4; tr. 12/6/04 at 79–80 (Brown).

20. The Company has fewer employees per customer than other utilities and, consequently, A&G costs are caused more by customer-oriented functions. Tr. 12/6/04 at 79-80 (Brown).

21. Assignment of A&G costs on a customer-weighted basis, as proposed by the Company, is appropriate. Findings 17–20, above.

## 2. Discussion

GMP classifies certain costs as Administrative and General. In its rate design, GMP largely proposes that these costs be allocated on the basis of customer count, with commercial and industrial customers weighted at 3.5 times the weighting of residential customers and transmission customers weighted at 35 times.

AARP contends, under FERC's system of accounts, that A&G costs should be limited to costs that are not assignable to any specific function. As a result, AARP states that A&G accounts should not include any customer-related costs.<sup>27</sup> Accordingly, AARP opposes assignment of these costs based upon customer count (since they are, by definition, not customer-related), but instead proposes to assign A&G costs on the basis of either energy consumption or revenues.<sup>28</sup> Using either an energy-based or revenue-based assignment as AARP recommends would shift significant costs away from residential customers to larger volume commercial and industrial users. Thus, Rate 63 would be assigned an allocation seven times greater than under

---

27. Steinhurst pf. (AARP) at 2-3; AARP Brief at 1–2.

28. Steinhurst pf. (AARP) at 2-4.

the Company's proposal and the C&I Transmission Service customer's share would increase by over 71,000 percent.<sup>29</sup>

I recommend that the Board reject AARP's proposal. If, in fact, the A&G category contained only costs that were not assignable, there may have been merit to this proposal. The evidence, however, does not support such a conclusion. Rather, the record shows that the bulk of the A&G costs relate to customer service and accounting functions and largely represent salaries and benefits for the personnel that perform these functions.<sup>30</sup> Thus, rather than being unassignable, the A&G category reflects costs that are, for the most part, customer-related. Applying the rate design principles the Board typically employs — *i.e.*, that costs should be assigned among rate classes on the principle of cost-causation — GMP's allocation of these costs on the basis of weighted customer counts is reasonable.<sup>31</sup>

Although I recommend that the Board accept GMP's use of weighted customer counts, I also recommend that the Board require the Company to reevaluate these customer weightings in its next rate design, based upon an analysis of the actual costs. GMP expends substantial amounts of time and effort on its large C&I customers as well as its sole transmission C&I customer, IBM. This includes negotiation of special contracts and expenses associated with obtaining approval of those contracts. These costs are captured in the A&G account, although it is not clear that the 3.5 and 35 times weighting adequately reflects these greater resource commitments. At the same time, GMP showed that the customer accounting functions may demand a proportionately higher resource commitment for smaller users than is reflected in the weighting. In the future, GMP should demonstrate that the weighting factors that it employs fairly reflect the relative costs of providing the A&G functions to each rate class.

GMP also argued that, if the Board adopted AARP's proposed allocation method, "other corresponding changes should also be considered."<sup>32</sup> Such changes, asserts GMP, could

---

29. Brown reb. pf at 4.

30. Tr. 12/6/04 at 79 (Brown); Brown pf. reb. at 4.

31. In fact, AARP's witness, Dr. Steinhurst, acknowledged that his recommendation may be different if GMP's A&G account actually included customer-related costs. Tr. 12/7/04 at 46 (Steinhurst).

It may be, as Dr. Steinhurst suggests, that the inclusion of customer-related accounting costs in the A&G category is inappropriate. GMP's accounting practices are not before the Board in this case. For purposes of the rate design, the record shows that, right or wrong, the A&G account includes these costs.

32. GMP Brief at 7.

dramatically increase the amount of costs assigned to the residential class.<sup>33</sup> GMP did not explain why such changes might be needed, however. Each of the allocation factors in the rate design proposal is intended to assign certain costs using cost-causation principles. It is not readily apparent why a change in one allocation factor would affect another factor that assigns a different set of costs. As I recommend that the Board adopt GMP's methodology for assigning A&G costs, it is unnecessary to evaluate the need for such adjustments.

#### **D. Allocation of Secondary Distribution Costs**

##### **1. Findings**

22. GMP's rate design allocated the costs of the secondary distribution system, line transformers and related services to each customer class according to that class's contribution to non-coincident peak (GMP refers to this allocation factor as "Maximum Customer Demand"). This is calculated as the sum of individual customer maximum loads to the total of such demands and reflects more customer-specific sizing of the system at the secondary level. Brown reb. pf. at 5; tr. 12/6/04 at 82-84 (Brown); exh. GMP-JWB-1 at 3.

23. The study allocated substation and primary service equipment costs on the basis of contribution to Class Diversified Demand (Class Maximum Demand). This is calculated as the ratio of individual class maximum demands to the total class demand. GMP then allocates bulk transmission and minimum generation capital costs on the basis of contribution to coincident peak. GMP calculates the coincident peak as the ratio of the highest monthly class loads at the time of the annual system peak load. *Id.*

24. The allocation of secondary distribution costs also affects the allocation of various material costs, including rate base and depreciation expense associated with the secondary distribution system. Steinhurst pf. at 4.

25. GMP also uses Class Diversified Demand to allocate costs for individual service drops. Steinhurst pf. (AARP) at 4.

26. The demand allocators used by the Company have been accepted for some time. Brown reb. pf. at 5.

---

33. Tr. 12/6/04 at 111 (Brown).

27. Use of Maximum Customer Demand to allocate secondary lines and transformers is supported by historical, generic load data. Brown reb. pf. at 6.

28. Assignment of secondary line and transformer costs on the basis of Maximum Customer Demand, as proposed by the Company, is appropriate. Findings 22–27, above.

## 2. Discussion

GMP's FACCSS assigns secondary line and transformer costs on the basis of Customer Maximum Demand (non-coincident peak).<sup>34</sup> GMP maintains that this allocation has been widely accepted. According to GMP, it divides the Transmission and Distribution system into three bins (bulk transmission and minimum generation capital costs, substations and primary service equipment, and secondary systems) and uses different factors to allocate each of these to achieve a fair result. In addition, GMP asserts that the use of the Maximum Customer Demand Allocator is supported by residential demand diversity data.

AARP recommends that the secondary costs should be allocated based upon energy, or if not energy, a blend of Class Maximum Demand and Customer Maximum Demand. AARP argues that an energy-based allocation is appropriate because "[i]f the only load to be served during the year were the peak hour load, it would be hard to economically justify building any distribution lines."<sup>35</sup> AARP states that use of an energy allocator also is appropriate because secondary facilities other than service drops are sized to take diversified loads into account.<sup>36</sup>

I recommend that the Board accept GMP's proposed allocation methodology. The facilities deployed in each segment of the secondary distribution system must be sized so as to ensure that they can serve customer loads during peak loads on that segment. Thus, even if the bulk of the energy on a part of the secondary system is used by a particular customer, the system must be capable of serving both that customer's demand and the demand of other customers taking power during the peak on that part of the distribution system.<sup>37</sup> For these reasons, the use

---

34. Steinhurst pf. (AARP) at 4-5; Brown reb. pf. at 5.

35. Steinhurst surr. pf. (AARP) at 7.

36. Steinhurst pf. (AARP) at 4.

37. The most precise measure would be the coincident peak for each subcomponent of the secondary distribution system, including each line and transformer. The amount of monitoring and data collection to reach such precision is likely to be extensive. No party presented such measurements here.

of the customer non-coincident peak as an allocator reasonably approximates the design needs of the secondary system as a whole.

The evidence of actual load diversity also supports assignment on the basis of Maximum Customer Demand.<sup>38</sup> Although dated, a study of residential demand diversity showed that the diversity in the demand imposed on system components largely depends on the number of customers served. GMP's allocation factor is much more consistent with the results of this diversity study than are AARP's alternatives.

AARP's proposal to allocate secondary distribution costs based upon class energy use would assign a much higher percentage of the costs to high load factor classes than is reasonable.<sup>39</sup> AARP justifies this assignment based upon the fact that customers derive benefits whenever they use the system. Energy-based allocation would capture this "value-of-service" concept. However, as discussed above, the system is designed in order to provide power at peak times. AARP's proposed allocation would assign a significant amount of costs associated with serving peak periods to customers based upon usage at non-peak periods. It also would assign to the Transmission Class a portion of the costs of line transformers, even though these facilities do not serve this class. Finally, an energy allocation factor in essence assumes a 100% load factor for each class, even though this is not the case.<sup>40</sup>

## **E. The Customer Charge for Rate 01**

### **1. Findings**

29. For rate classes without a demand charge, GMP assigned the change in revenue requirements to the energy charge and proposed that the customer charge would remain unchanged. As a result, the Company's proposed tariffs did not change the Residential Rate 01 customer charge. Exh. GMP-JWB-10.

30. GMP's cost allocation model first identifies customer-related costs. These are costs that would typically be collected under a customer charge because they vary with the number of customers. Tr. 12/6/04 at 39 (Brown).

---

38. Brown reb. pf. at 6.

39. Brown reb. pf. at 6–7.

40. Brown reb. pf. at 6–7.

31. To determine the customer charge, GMP applies an adjustment. For residential customers, GMP assigns 80 percent of the customer-related costs to the customer charge. For other customer classes, GMP assigns lower percentages to the customer charge. In the case of commercial and industrial customers, GMP assigns only 27 percent of the customer-related costs to the customer charge. Exh. GMP-JWB-7, Schedule 14.

32. The customer charge adjustment factors were developed so that the customer charge under the model did not change significantly from previous customer charges. Tr. 12/6/04 at 40 (Brown).

33. On average, GMP assigns 62 percent of customer-related costs to the customer charge. Using this allocation factor for the customer-related costs would produce a customer charge of \$8.76 per month for residential Rate 01. Exh. GMP-JWB-7, Schedule 14.

34. GMP did not file a cost study showing the marginal cost of providing service to customers.

## 2. Discussion

At the present time, the customer charge for residential ratepayers served under Rate 01 is \$11.27.<sup>41</sup> GMP proposes to retain the customer charge at the present level.<sup>42</sup> The Department supported the Company's proposal to keep the customer charge at \$11.27.<sup>43</sup> By contrast, AARP proposes that the customer charge be reduced to either \$9.00 or preferably \$6.00.<sup>44</sup> AARP offered three reasons for reducing the customer charge: (1) the Company's residential customer charge was above those of other utilities in the region; (2) a customer charge reduction would support conservation efforts; and (3) a reduction would materially assist small customers.<sup>45</sup> CLF supported AARP's position, arguing that reducing the customer charge has the advantage of encouraging a reduction of usage, because of the increase in the energy charge that would be necessary to recover the full costs of providing service to the class of customers.

---

41. Steinhurst pf. (AARP) at 5.

42. Brown reb. pf. at 8.

43. Berry pf. at 9; tr. 12/7/04 at 133 (Berry).

44. Steinhurst (AARP) pf. at 6; AARP Brief at 5.

45. *Id.* at 5-6; Steinhurst surr. pf. (AARP) at 2-3; tr. 12/7/04 at 15 (Steinhurst).



GMP maintains that its residential customer charge is not out of line with other Vermont utilities, since two of the six largest have customer charges at or above \$11.00, with all above \$7.50.<sup>46</sup> In addition, GMP argues that the current residential customer charge is equal to roughly 80 percent of the properly allocated customer costs, whereas the energy charge is slightly above marginal costs. GMP asserts that a reduction in the customer charge would require an increase in the energy charge, which is already above marginal cost.<sup>47</sup> GMP contends that there is no basis to reduce a below-cost rate element where the result is to increase another rate element even further above cost. Thus, GMP's methodology attempts to set the energy rates based upon marginal costs and then price the customer charge residually.

As a general rule, the Board's policy has been to establish cost-based rates.<sup>48</sup> In particular, setting energy prices at the margin send the correct price signals.<sup>49</sup> By contrast, pricing above cost will tend to cause customers to under-consume and lead to an inefficient allocation of resources.<sup>50</sup> However, GMP has not based its energy charges solely upon the marginal energy price. Rather, because GMP's embedded costs of power exceed the long run marginal costs of that same power, setting the energy charge at marginal cost itself is not possible. Among the adjustments included in GMP's rate design to ensure that it recovers its full embedded costs is an increase in the energy charge to recover a proportion of the costs that it classifies as customer-related.

The problem with GMP's approach is that it produces inequitable results between customer classes. GMP has classified the costs that it considers to be customer-related. It then asks residential customers to pay for 80 percent of these costs through the customer charge, with the remainder being collected through energy charges. By comparison, large C&I customers pay only 27 percent of these customer-related costs through fixed charges, with the remaining 73 percent being recovered through the energy charge. In fact, the percentage of costs allocated to

---

46. Brown reb. pf. at 9.

47. Brown reb. pf. at 9; tr. 12/6/04 at 44 (Brown).

48. Tariff Filing of Green Mountain Power Corp., Docket No. 6107, Order of 1/23/01 at 93. See Tariff Filing of Central Vermont Public Service Corp., Docket No. 5835, Order of 3/17/97 at 11 (prices based on long-run marginal costs are efficient and equitable).

49. Tr. 12/6/04 at 44 (Brown).

50. Tr. 12/7/04 at 64-65 (Weiss).

the residential customer charge (80) is higher than the assignment for any other tariffed rate (which range from 0 to 72 percent).<sup>51</sup>

GMP's only explanation for this discrepancy was that it had attempted not to change the customer charges, so that the percentage of customer-related costs allocated to the customer charge is dependent on the existing level of that charge; GMP increased the energy charges to recover the residual. I find this rationale unconvincing. Instead, I recommend that the Board modify the customer charge for residential customers so that 62 percent of customer-related costs are recovered through the customer charge. Considering that GMP's customer charges for *all* customer classes are not strictly cost-based, it is unfair to require residential customers to pay a significantly higher percentage of the customer-related costs (as identified by GMP) through the customer charge. The fairer method, which I recommend here, is to apply the average of GMP's proposed recovery of the customer-related costs across all customer classes — 62 percent.<sup>52</sup> This customer charge — \$8.76 — is within the range of such charges for other Vermont utilities.

I recognize that using the 62 percent allocation factor may move the residential customer charge farther away from collecting all customer-related costs. However, the evidence shows, as discussed above, that the customer charges for all customer classes are not strictly cost-based.

GMP suggested that in assessing the relative allocation factors, the Board should also consider the costs of transformers, which are not included in the customer-related cost category, but could be considered to be customer costs.<sup>53</sup> These transformer costs are at least \$2.2 million, or 18% of the roughly \$12.3 million in customer costs assigned in the FACCSS to Rate 01. The addition of transformer costs would lower the customer charge contribution from 80% to 68% (\$9.8 million/\$14.5 million).<sup>54</sup> GMP asserts that this results in a ratio between the customer charge and associated costs that is not out of line with the average of all rate classes.<sup>55</sup>

GMP is correct that including the transformer costs would reduce the percentage of the customer-related costs allocated to the residential customer charge. GMP has not, however, shown that this adjustment is reasonable. GMP's own rate design does not include the transformer costs in its classification of customer costs, so it is unclear why such an adjustment

---

51. Exh. GMP-JWB-7, schedule 14.

52. Exh. GMP-JWB-7, Schedule 14.

53. Brown reb. pf. at 9; tr. 12/6/04 at 44 (Brown); tr. 12/7/04 at 134-36 (Berry).

54. Exh. GMP-JWB-7, schedule 14; tr. 12/6/04 at 108 (Brown).

55. Exh. GMP-JWB-7, Schedule 14.

to the FACCSS is appropriate now. In addition, GMP has not shown how the inclusion of the transformer costs in customer-related costs may affect the other customer classes. It would seem likely that similar adjustment would be needed for at least some other rate classes. Moreover, if the transformer costs for residential customers are included in the total of customer-related costs for all customer classes, the average of these costs that all customers pay through the customer charge would drop to 57 percent.<sup>56</sup> This average is still substantially below the 68 percent assigned to the residential customer charge under GMP's revised calculations and would warrant an adjustment to the customer charge for the reasons set out above.

## **F. Special Charges**

### **1. Findings**

35. GMP has a Special Charges Tariff that specifies charges for work performed for individual customers. This includes the charges for initial service connection, disconnection and reconnection, bill collection, returned checks, temporary services, line extensions, and late payments. Special Charges Tariff.

36. GMP proposes to increase its special charges, based on a study performed by Company staff responsible for costing and scheduling of field work. The proposed changes to the special charges better reflect the costs of providing the associated services. Brown pf. at 7; exh. GMP-JWB-3A.

37. Under its collective bargaining agreement, GMP must pay higher wage rates for after-hours assignments. The proposed special charges tariff reflects the actual cost that GMP incurs. Brown reb. pf. at 10.

38. GMP's practice of hand-delivering disconnection notices to customers that paid by means of a dishonored check to avoid disconnection benefits the Company and its customers by minimizing uncollectibles, much in the same way as customer deposits. Brown reb. pf. at 10.

39. The Company's proposed special charges are appropriate. Findings 35–38, above.

### **2. Discussion**

---

56. Exh. GMP-JMB-7, Schedule 14. This calculation is based upon the unsubstantiated assumption that the transformer cost adjustment applies only to the residential class.

GMP's tariffs contain a variety of "special charges" for particular services that the Company provides to individual customers. These services include after-hours connection or reconnection of service and returned-check charges. GMP's proposed rate design would significantly increase the fees set out in the Special Charges Tariff.

AARP objects that the proposed increases are "extraordinarily large and are not phased in." According to AARP, these charges affect those who can least afford them and are arguably discriminatory. AARP notes that some customers find it inconvenient to schedule service calls during normal working hours, so the large increases may hit them disproportionately. AARP suggests that these customers may be low-income, so that the tariff has a discriminatory effect. AARP, therefore, asks that the Board require GMP to phase-in any changes, set a more reasonable charge for connections and reconnections outside normal hours, reduce the returned check charge by one-half, and ensure that Customer Operations Associates who return checks are able to provide an explanation of the types of recourse customers have to avoid disconnection.<sup>57</sup>

GMP counters that only "an extremely small fraction" of GMP's customers are reconnected after hours, and the need to do so in connection with a customer move is easily avoided, by advising the Company of the move in time for GMP to reconnect during normal business hours.<sup>58</sup> GMP also asserts that its policy on hand-delivering disconnection notices to customers that paid by a check backed by insufficient funds helps minimize uncollectable revenues, by shortening the disconnection period.

I recommend that the Board accept GMP's proposed Special Charges Tariff as filed. GMP has presented sufficient evidence to demonstrate that the charges in the proposed tariff reasonably reflect the underlying costs. Thus, while the rate increases are large, the evidence suggests that the resulting rates are reasonable. I also recommend that the Board not phase-in the rate increases to the Special Charges. The Board has phased-in rate increases in the past to minimize rate shock for customers, where customers have paid certain rates and would suddenly be expected to pay much higher rates. In fact, elsewhere in the Proposal for Decision, I accept GMP's proposal to phase-in the changes to Rate 63. The Special Charges are different. They reflect one-time charges for particular services performed by GMP rather than recurring charges.

---

57. Steinhurst pf. (AARP) at 6–8; AARP Brief at 5–7.

58. Brown reb. pf. at 9-10.

The evidence presented by GMP suggests that few customers incur the Special Charges for after-hours connection or reconnection. It is reasonable to assume that the charges for returned checks associated with payments to avoid disconnections also are not common. Because of their intermittent and non-recurring nature, there is unlikely to be rate shock associated with the increased Special Charges.

Finally, I find no merit in AARP's claim that the charge for after-hours reconnection may be discriminatory, because low-income customers may only be able to move on weekends.<sup>59</sup> AARP provided no data to substantiate the assertion that the charge has an unfair effect.<sup>60</sup> Similarly, AARP failed to demonstrate that the presence of this charge unfairly burdens customers by requiring payment on two electric accounts for one or two days.

## **G. Proposed Efficiency Block**

### **1. Findings**

40. GMP proposes that on-peak energy charges in Rate 63 and C&I Transmission Service Rate be based in part on the customer's on-peak load factor. Under GMP's proposal, a lower charge per kWh would apply to energy consumed at a level above a specified load factor. GMP refers to the lower-priced block of power as the "efficiency block." Brown pf. at 5.

41. The efficiency block represents a declining block rate structure. For customers that qualify for the block, higher energy use is priced at a lower rate than the initial block. Weiss pf. at 13; Steinhurst pf. (CLF) at 3–4.

42. The proposed lower rate for efficiency-block energy would be provided by recovering the Company's Installed Capacity ("ICAP") costs from all customers in the initial energy block. The efficiency block would collect ancillary costs, transmission costs, and marginal energy costs. Tr. 12/6/04 at 27, 89 (Brown).

43. The proposed efficiency block creates an incentive for the customer to increase its load factor by controlling maximum on-peak demand. Brown pf. at 5; Weiss surr. pf. at 6; tr. 12/7/04 at 71 (Weiss).

---

59. Steinhurst pf. (AARP) at 6-7.

60. Tr. 12/7/04 at 21-22 (Steinhurst).

44. Under GMP's proposal, the efficiency-block rate would not be available to the customer taking service under the C&I Transmission Service (*i.e.*, IBM) unless the existing Economic Development Agreement with this customer were terminated. Brown pf. at 5.

45. GMP set the efficiency block for the C&I Transmission Service at a level that mirrors the current service for IBM under the Economic Development Agreement approved in Docket 6867. Tr. 12/6/04 at 54, 132 (Brown).

## 2. Discussion

For Rate 63 and the C&I Transmission Service Rate, GMP proposes a new rate structure in which the energy rate paid by a customer declines if the customer maintains a high load factor. GMP achieves this declining block rate, which it styles the "efficiency block," by allocating all of the ICAP charges to the initial block. GMP maintains that the efficiency block encourages customers to have high load factors. GMP also argues that the efficiency block provides an incentive for customers to reduce demand.<sup>61</sup> GMP contends that assigning ICAP to energy charges sends a more effective price signal as to costs when a customer uses electricity at peak periods than would assigning the ICAP component to the demand rate.<sup>62</sup> Finally, GMP asserts that it is appropriate to collect ICAP costs in the energy charge because it is set on a monthly basis and therefore should not be subject to a demand-charge-based ratchet.<sup>63</sup>

CLF opposes the efficiency block.<sup>64</sup> CLF raised three primary objections to the efficiency block: (1) the efficiency block is really a declining block rate that offers a discount for increased energy use at peak; (2) it addresses total energy use rather than peak load; and (3) it is ineffective because many customers cannot control peak load.<sup>65</sup> CLF contends that the efficiency block appears to be largely designed to offer IBM a tariff-based discount to replace the current EDA, which is not appropriate.

The evidence persuades me that the Board should reject the proposed efficiency block and direct GMP to refile its Rate 63 and C&I Transmission Service tariffs without that block. Two primary reasons lead me to this conclusion. First, the efficiency block exists because GMP

---

61. Tr. 12/6/04 at 136 (Rosenberg).

62. Tr. 12/6/04 at 85, 87 (Brown).

63. Tr. 12/6/04 at 85-87 (Brown).

64. The Department does not oppose the efficiency block. Berry pf. at 2, 7; tr. 12/7/04 at 141 (Berry).

65. Weiss pf. at 13; Steinhurst pf. (CLF) at 3-4.

has assigned the ICAP charges to the initial block, so that these charges are not collected in the efficiency block. Yet GMP has shown no rationale for arbitrarily assigning ICAP charges solely to a portion of the energy rate for certain customers. In fact, it would be more appropriate to assign ICAP costs to the demand charge than to the energy component, particularly if one goal is to keep energy charges as close to marginal cost as possible. ICAP is a cost incurred to meet peak demand,<sup>66</sup> although it is more variable than other demand charges, since it varies monthly.<sup>67</sup> GMP proposes to collect the ICAP charges in the energy rate rather than demand rate so that it would not be subject to the demand ratchet for customers.<sup>68</sup> However, this does not change the nature of the charge as being related to capacity and demand rather than to energy. Moreover, including the ICAP charge in the demand rate has the benefit of encouraging customers to reduce demand, thus conveying an appropriate price signal.<sup>69</sup>

In the alternative, GMP could include the ICAP costs in the energy rate, but if the Company elects to do so, it should apply to all energy usage.<sup>70</sup> GMP's proposal would exempt certain customers (with high load factors) from paying ICAP on the efficiency block, even though other customers taking power at the same time under Rate 63 would be paying for ICAP in their rates. GMP has presented no rational basis for this disparate treatment.

The second primary concern with the efficiency block is its declining rate structure. As the parties have suggested in this docket, the rate structure and, in particular, the attempt to set energy rates close to marginal costs, is intended to send price signals to consumers and encourage efficient use of electricity. The declining block rate structure sends the signal to consumers that increased usage costs less, which is not consistent with the current market pricing. If there is any effect of increased usage at a particular point in time, it would be to increase the cost of obtaining power, not decrease it.

GMP argues that, although the efficiency block results in reduced energy charges per kWh for high-load-factor customers, it is not a declining block rate because the reduced charges are available only if the customer's load factor exceeds 65%. According to GMP, by offering a reduced rate only where the customer reduces the Company's unit costs, the efficiency block is no

---

66. Tr. 12/6/04 at 85 (Brown).

67. Tr. 12/6/04 at 85 (Brown).

68. Tr. 12/6/04 at 86 (Brown).

69. Tr. 12/6/04 at 136 (Rosenberg).

70. In its compliance filing, GMP should indicate which option for recovering ICAP charges it elects.

more a declining block rate than an energy rate with discounts for off-peak usage.<sup>71</sup> This argument is unpersuasive. The simple fact that the lower prices in the efficiency block are available only if the customer has a high load factor does not alter the fact that the prices for the higher increments of energy use *are* lower than the prices for lower uses.

CLF also raises concerns that the efficiency-block structure does not create sufficient incentive for customers to reduce their peak demand and shift usage to off-peak periods.<sup>72</sup> According to CLF, this effect occurs because the efficiency block focuses on total energy use (since it only takes effect for high-load-factor customers). GMP disagrees, stating that the lower prices in Rate 63 for off-peak usage create adequate incentives to shift load and that customers already are taking steps to reduce their peaks.<sup>73</sup>

As I find the efficiency block to be ill-advised for other reasons, I need not fully address this issue. I note that GMP is correct that the lower rates in Rate 63 for off-peak periods creates some incentives to shift loads to those periods. However, this effect arises not from the efficiency block (which provides a lower rate for customers with high load factors) but from the division of Rate 63 into peak and off-peak rates. The efficiency block itself does not encourage load shifting, but rather creates incentives for customers to have a relatively even load in all time periods, including peak periods, so as to maximize load factors. Once a customer sets a monthly peak, the efficiency block is most effective if the customer's usages stay right at that peak load for the month.<sup>74</sup> Thus, elimination of the efficiency block does not reduce the incentives to shift load and may actually increase them.

As for an incentive to reduce peak loads, it is not clear that the efficiency block would have this effect.<sup>75</sup> As GMP points out, many customers are already taking steps to reduce their peak load, at least in part due to energy-efficiency efforts. More significantly, as noted above, peak-load reduction may be achieved more effectively simply by allocating the ICAP to the demand charge, where the price signal would be direct.

By recommending that the Board reject the allocation of the ICAP charges solely to the initial block of energy, I do not mean to disparage GMP's efforts to encourage higher load

---

71. Brown reb. pf. at 11.

72. Steinhurst pf. (CLF) at 3.

73. Brown reb. pf. at 12.

74. Tr. 12/7/04 at 51 (Steinhurst).

75. Tr. 12/7/04 at 51 (Steinhurst).



factors. It may be appropriate to develop a tariff structure for Rate 63 and the C&I Transmission Service that provides incentives to maintain high load factors (assuming that such an incentive is consistent with the underlying costs). In this instance, GMP's mechanism for achieving that result is simply not reasonable and sends inappropriate price signals.

## **H. Proposed Riders**

### **1. Findings**

46. GMP has proposed tariff riders to reflect programs currently provided through special contracts, as encouraged in the Board's December 22, 2003, Order in Docket No. 6867. Riders were created to incorporate the Company's programs relating to economic development agreements ("EDAs"), interruptible and dispatchable load (replaced with a Curtailable Load Rider and a Half Curtailable Load Rider), the Independent System Operator ("ISO") demand response initiative and other programs. Brown pf. at 6–9.

47. GMP also proposed a new Critical Peak Rider, providing for discounted peak demand and energy charges, but much higher charges during hours identified by the Company as critical peak hours. Brown pf. at 7.

48. The riders were drafted to reflect existing arrangements, except where changes were clearly warranted or necessary to avoid undue price changes to customers. Brown reb. pf. at 12; Brown pf. at 8.

49. The proposed riders reflect existing practice and apply to large commercial and industrial customers that have the ability to administer these types of programs. Brown reb. pf. at 13.

50. The proposed Critical Peak Rider to Rate 3 provides for higher charges during critical peak hours and lower charges at other times. These higher charges would encourage efficiency. Weiss pf. at 13.

51. The proposed Economic Development Rider (the "EDA rider") provides discounts in the demand rate for three years of 75%, 50%, and 25%, respectively. These discounts are smaller than the discounts in existing EDAs. Brown pf. at 8.

52. The proposed EDA Rider would only be available for incremental load associated with the creation of new jobs. Brown reb. pf. at 14.

## 2. Discussion

CLF argues that the proposed tariff riders are poorly designed and will not provide effective load control. According to CLF, the Critical Peak, Curtailable Load, and Half Curtailable Load riders set for off-peak power are too high relative to the underlying rate and thus fail to encourage efficiency and load control. CLF also suggests that, instead of using a discount to provide customers with savings, GMP should replace the riders with a bill credit for the actual reductions that reflect GMP's savings. CLF further argues that the riders are too limited, in that they preclude a customer from taking service under any combination of riders.

CLF also challenges the EDA Rider for not adequately assuring against unjust discrimination. CLF identifies three alleged problems with this rider: (1) the discounts should be tied to measures of economic activity other than electric consumption; (2) the discounts should not be applied to the peak-hour demand charges; and (3) customers served by this rider to Rate 63 should be eligible for other riders.<sup>76</sup> Finally, CLF asserts that the EDA Rider omits some important elements, such as review by the Board and reporting on energy efficiency measures.

GMP responds to the criticism of the off-peak prices under the riders by stating that the rate disparity of which CLF complains is justified by the differences in underlying costs. GMP also asserts that the riders cannot generally be combined because of differing rate structures and goals. In addition, GMP objects to CLF's proposal for replacing the discount with a credit calculated after the fact; GMP characterizes this proposal as essentially a real-time pricing program.

As to the EDA Rider, GMP states that the inclusion of the rider in the tariff helps reduce unjust discrimination, rather than increasing it. GMP views the rates as providing a link to economic activity, because it is only available for incremental load resulting from new jobs.<sup>77</sup> GMP also states that it does not oppose continued Board review of the provision of service under the rider and reporting of energy efficiency measures, although it views these provisions as unnecessary.<sup>78</sup>

---

76. Weiss pf. at 14, 18; Steinhurst pf. (CLF) at 5.

77. Brown reb. pf. at 14.

78. GMP Reply Brief at 5.

With the exception of the EDA Rider (which I discuss in more detail below), I recommend that the Board approve GMP's proposed riders (subject to the condition that GMP reevaluate whether it is possible to allow customers to take service under more than one rider). These riders provide a reasonable substitute for many of the existing special contracts. As the Board has stated previously, tariff-based rates are preferable to special contracts whenever possible. By including the rates in the tariff rather than in special contracts, GMP has ensured that the rate is available to all similarly situated customers on terms that are nondiscriminatory, thus limiting rather than increasing GMP's discretion.<sup>79</sup>

I am not persuaded by CLF's arguments. CLF has not shown that there is any particular value to replacing the discount proposed by GMP with a system in which the customer pays normal tariff rates and then receives a credit back. The difference between the two approaches appears to be largely semantic.<sup>80</sup>

CLF also argues that the tariff should permit customers to take service under any combination of riders.<sup>81</sup> However, considering the structure and purpose of the riders, such a requirement may be impracticable.<sup>82</sup> For example, service under the Critical Peak Rider and the Half-Curtailable Load Option would result in conflicting energy prices.<sup>83</sup> If two riders could work in concert, GMP should modify its tariff to permit the customer to use both riders; however, no party identified riders that would fit this criteria so I do not recommend any specific changes to the rider.

I also recommend that the Board approve the EDA Rider, with two conditions proposed by CLF: the requirements for Board approval of the agreements and for continued submission of reports on energy efficiency measures. As GMP has stated, for the most part, the rider continues

---

79. Martin reb. pf. at 1–2; exh. GMP-DPM-1.

80. CLF's approach could be tailored to adjust the credit monthly based upon actual savings, reflecting real-time prices. However, such an approach results in a variable rate, with no notice to the customer of the rates it will face *and* without the benefits that a real-time pricing program would create by allowing the customer to adjust load in response to anticipated prices. These flaws exceed any possible value of such an approach.

81. Weiss pf. at 18.

82. Tr. 12/7/04 at 72 (Weiss).

83. Exh. GMP-JWB-9.

the criteria that GMP has set out for economic development agreements and that the Board has accepted.<sup>84</sup> These terms have worked reasonably well to date.

However, the evidence has highlighted one significant concern with GMP's proposal. GMP would eliminate Board review of the EDA rates, which is consistent with the goal of establishing clear guidelines in tariffs that replace the special contract approach. Nonetheless, as GMP acknowledges in its brief, the EDA Riders may not include all the details necessary for administration of the EDA program.<sup>85</sup> For example, the baseline for determining incremental power usage is a recent 12-month period, with no specifications of how to select the appropriate period for measuring that load, leaving substantial discretion.<sup>86</sup> Such broad discretion may be acceptable in the context of special contracts which are subject to Board review and approval; for tariffs, it creates the potential for discriminatory treatment or the offering of discounted rates that are not justified.

GMP attempts to address this problem by essentially shifting the review now performed by the Board to the Department and regional development bodies. This solution is inadequate. Instead, I recommend that provision of service under the EDA Rider continue to require Board approval to determine whether the baseline period selected by GMP is appropriate and the commitment to provide incremental jobs is sufficient.<sup>87</sup>

I also recommend that the Board continue to require GMP to report on energy-efficiency measures in conjunction with service taken under the EDA riders. Customers seeking to obtain discounted electric rates to promote job growth should also be implementing reasonable, cost-effective measures to control their energy use.

Most of CLF's arguments in opposition to the EDA Rider are unpersuasive. The evidence shows that the peak and off-peak rates are largely based upon the underlying costs of serving during those periods. The spread between the two rates may be small, but it is cost-based and should be accepted. The rider also applies only to incremental load associated with the creation

---

84. *Investigation re: Green Mountain Power Corporation's Proposed Contract with S.B. Electronics*, Docket 5604, Order of 10/28/92.

85. GMP Brief at 16.

86. Tr. 12/6/04 at 59–60 (Brown).

87. I also note that GMP's EDA rider is limited to job growth. The Board has approved other EDAs based upon commitments to retain jobs. Such job-retention EDAs are not covered by the rider and would still require special contracts.

of new jobs. Thus, it is associated with increased economic activity, contrary to CLF's assertions. Finally, GMP also has adequately shown that, for practical reasons, the EDA rider should not be available in conjunction with other riders.

## **I. Load Control for Small Loads**

### **1. Findings**

53. Existing GMP customers taking service under Rate 02 receive a monthly credit of \$2.50 in exchange for permitting the Company to interrupt electric service to the customer's water heater. Brown pf. at 6.

54. The water heater credit program no longer functions properly. The technology underlying the water heater credit program has become outdated and replacement equipment is no longer available. *Id.*

55. GMP has been phasing out service under Rate 02 as customers relocate. GMP now proposes to eliminate the rate entirely. *Id.*

56. A few years ago, the Company analyzed replacement of the ripple control system with pagers, but found that installation of pagers on water heaters at the factory was marginally economic, and that field retrofits were not economic. Brown reb. pf. at 16; tr. 12/6/04 at 33 (Brown).

57. Other alternatives to ripple control are less economical than the pager approach. In its initial portfolio of ISO Load Response programs, the Company designed a factory installation proposal that was feasible in concept, but it was incompatible with the statewide contract template implemented the next year. The Company also analyzed to a limited extent the potential for controlling residential air conditioning, but concluded that it was not cost-effective due to the high cost of controlling a relatively small load. Brown reb. pf. at 16; tr. 12/6/04 at 36 (Brown).

58. Elimination of Rate 02 is reasonable. Finding 53-57, above.

### **2. Discussion**

GMP proposes to terminate Rate 02, under which customers receive a monthly credit in exchange for allowing GMP to interrupt electric service to the customer's water heater. GMP asserts that the program no longer functions properly. At the present time, GMP does not

propose a replacement for the water heater credit program. GMP indicates that it intends to continue to monitor the technology market in order to evaluate the potential for controlling small loads, including air-conditioning and water-heating loads.<sup>88</sup>

No party challenged the Company's proposal to terminate Rate 02.<sup>89</sup> However, CLF contended that more should be done to implement programs for control of small loads.<sup>90</sup> CLF notes that GMP has not performed any study of controlling residential or non-residential air conditioning use during peak periods.<sup>91</sup> Thus, CLF proposed that the Company be required to analyze current and soon-to-be-available load control technologies for controlling water-heater and air conditioning loads and to provide the results of its analysis to the parties in this case.<sup>92</sup> T

I recommend that the Board accept GMP's proposal to eliminate Rate 02. The Board should also require GMP to file a report, within one year of the date of this Order, detailing the results of its evaluation of the potential for controlling small loads and recommending any tariff changes that may be appropriate to control such loads.

## **J. Alternative Rate Designs**

### **1. Findings**

59. There are a number of approaches being used to encourage more efficient use of electricity in the United States and abroad. These include real-time pricing, seasonal or peak-load pricing, interruptible loads and increasing block rates. Weiss pf. at 4.

60. Real-time pricing better reflects costs imposed by customers on the system and promotes efficient use of resources. Tr. 12/6/04 at 22 (Brown); Brown reb. pf. at 3.

61. If real-time pricing is based on the day-ahead market, the prices can be extremely volatile. Berry surr. pf. at 15.

62. Customers on energy-only rates have been reluctant to accept real-time rates, and implementation costs are relatively high for energy-only customers, who typically have relatively low levels of consumption. If real-time rates were mandatory, customer-acceptance issues would be aggravated. Brown reb. pf. at 3.

---

88. Brown reb. pf. at 16; tr. 12/6/04 at 92-93 (Brown).

89. Weiss pf. at 16; tr. 12/7/04 at 92 (Weiss), 137 (Berry); Berry pf. at 2.

90. Steinhurst pf. (CLF) at 6; Weiss pf. at 12, 16.

91. Tr. 12/6/04 at 36 (Brown).

92. Steinhurst pf. (CLF) at 6.

63. Voluntary real-time pricing is less effective than mandatory pricing, because only customers that could reduce costs at existing or easily achievable usage patterns would select the rate. Brown reb. pf. at 3.

64. GMP has not analyzed how real-time rates would change either load or consumption. Tr. 12/6/04 at 23 (Brown).

65. GMP's rates were seasonally differentiated from 1987 to 2001, and were controversial throughout that period. They were eliminated due to the reduction in the cost differential between winter and summer periods, as reflected in the regional energy clearing prices and forward contracts. Brown reb. pf. at 17.

66. More than half of the Company's load is served under time-of-day rates that partially address the fact that power costs vary by time period, including seasons. *Id.*

67. Energy prices and the probability of establishing an annual peak have recently been materially greater during the winter and summer periods than in the shoulder months. A tariff with winter and summer peak rates, however, would result in four rate changes each year. This would create the potential for customer confusion and weaken the intended price signals, while affecting only a relatively small proportion of the annual energy usage. Tr. 12/7/04 at 87 (Weiss).

## 2. Discussion

CLF has identified a number of alternative rate structures that it maintains have the potential to encourage more efficient use of electricity. CLF asks the Board to "order GMP to identify and analyze opportunities to include real-time pricing, seasonal or peak load pricing, interruptible load measures and increasing block rates for residential, commercial and industrial rates." CLF requests that the Board require GMP to report (by a date specified by the Board) on the results of this analysis and to propose to the Board pilot programs to provide data for further evaluation and new programs to the extent these programs are cost-effective.<sup>93</sup>

GMP asserts that the record does not demonstrate that any of CLF's proposals are cost-effective. GMP, relying upon testimony from the Department, also takes the position that evaluation of these proposals should be done in the context of a generic state-wide investigation,

---

93. CLF Brief at 18.

since such issues require additional analysis that is likely not cost-effective for any single utility to undertake.<sup>94</sup>

The evidence suggests that at least some of CLF's proposed programs offer potential benefits and merit further investigation. The primary difference between the parties is the mechanism for such an analysis, with CLF asking the Board to direct GMP to conduct the review and GMP seeking to defer the issue to a generic state-wide investigation.

It is unclear at this time that the potential benefits merit a generic investigation. Real-time pricing can produce more efficient electric use, but the costs of metering, customer-acceptance issues, and continuing changes in the wholesale electric markets may reduce its value and effectiveness. Similarly, seasonal rates are conceptually sound, but under the current wholesale market rates, it may require separate rates for each of the four seasons. Such a structure would likely entail four rate changes per year, confusing customers and, thereby, diminishing the value of the pricing signals and increasing customer resistance.

Nonetheless, experience has shown that changes in market prices and technology can alter the benefits of such mechanisms. Some evaluation of the merits of expanded real-time pricing and other alternative rate structures is, therefore, appropriate. If such alternatives prove to be cost-effective, it would be reasonable for utilities, including GMP, to implement them; this obligation is inherent in the duty to pursue least-cost methodologies towards the provision of energy service. Accordingly, rather than opening a generic investigation, it is most appropriate for GMP (and other utilities) to explore such options as part of their integrated resource planning and incorporate that analysis in the next filed Integrated Resource Plan ("IRP"). If an IRP identifies reasonable rate structures that contribute to the provision of least-cost service, the Board can then reconsider whether to initiate a generic investigation.

## **K. The Energy Efficiency Charge Exemption**

### **1. Findings**

68. Certain special contracts, including IBM's economic development agreement, have been exempt from paying the energy efficiency charge ("EEC") with respect to load subject to the agreement. Brown supp. pf. at 1–2; *Investigation into the Department of Public Service's*

---

94. GMP Brief at 21 (citing tr. 12/7/04 at 140 (Berry)).



*proposed Energy Efficiency Plan Re: Phase II*, Docket 5980, Order of 11/19/99 at 17–18; *Investigation into the Energy Efficiency Charge for the Year 2004*, Docket 6874, Order of 10/16/03 at 11.

69. The EEC exemption for IBM's economic development agreement was originally the product of a settlement of Docket 5980. Tr. 12/7/04 at 58 (Steinhurst).

70. GMP proposes to extend the exemption to any load served under the proposed efficiency block of the C&I Transmission Service EDA Rider. Brown supp. pf. at 2; Rosenberg pf. at 5.

71. IBM now pays the EEC for load that is served under tariffed rates. Tr. 12/6/04 at 55–56 (Brown).

72. The 2005 EEC is calculated based upon the assumption that portions of IBM's load served under the existing economic development agreement are exempt from the EEC charge. Brown supp. pf. at 2.

73. The C&I Transmission Service Rate efficiency block was designed to approximate the amount of load currently subject to a discount under IBM's current economic development agreement, and is unavailable to the extent IBM is served under an economic development agreement or EDA Rider. Exh. GMP-JWB-9; tr. 12/6/04 at 56 (Brown); exh. GMP-JWB-9 (C&I Transmission Service EDA Rider).

74. Because of the design of GMP's proposed tariffs and riders, service under either the EDA Rider or the efficiency block essentially would reflect a continuation of current arrangements under the economic development agreement. Tr. 12/6/04 at 57 (Brown).

75. Customers taking service under the efficiency block also benefit from the system-wide energy efficiency resources acquired with EEC funding. Steinhurst supp. pf. at 3.

## 2. Discussion

At the present time, IBM purchases most of its power under a tariffed rate. But a noticeable portion of IBM's load (approximately 15%) is served under an economic development agreement<sup>95</sup> — a special contract that the Board approved in Docket 6867.<sup>96</sup> To date, the portion of IBM's load served under the special contract has been exempt from paying the EEC.

---

95. Tr. 12/6/04 at 57 (Brown).

96. Order of 12/23/03. The special contract was a renewal of prior agreements.

The exemption arose as part of a settlement in Docket 5980, in which the Board first established the energy efficiency utility, and has been continued each year as part of settlements that the Board has accepted each year since the initiation of the exemption.<sup>97</sup>

GMP proposes to continue to exempt a portion of IBM's load from the obligation to pay the EEC. Specifically, GMP would exempt the efficiency block component of the transmission tariff from the EEC.<sup>98</sup> According to GMP, the efficiency block represents a reasonable proxy for the proportion of IBM's load now served under the economic development agreement.<sup>99</sup> GMP also maintains that discontinuation of the exemption would also result in an increase in total revenues and therefore would be inconsistent with the fundamental principle of revenue neutrality that underlies rate design proceedings.<sup>100</sup> IBM supports GMP's proposal, asserting that the efficiency block for the transmission rate should be exempt from the EEC in order to preserve the status quo.<sup>101</sup> The Department also supports GMP's proposal.<sup>102</sup>

CLF opposes extension of the EEC exemption to the efficiency block of the transmission tariff or to any other new economic development agreement. According to CLF, the proposed exemption for IBM (the only customer served under the transmission tariff) would be unfair as it provides special treatment that is not provided to other customers.<sup>103</sup> CLF also maintains that transmission service customers benefit from the systemwide savings achieved by demand-side management in the same manner as other customers.<sup>104</sup>

Based upon the evidence presented here, I recommend that the Board find that the EEC should apply to all tarified services, including the efficiency block of the transmission tariff.<sup>105</sup> All customers benefit from energy efficiency programs, including customers that do not take

---

97. See e.g., *Investigation Into the Energy Efficiency Charge for the Year 2004*, Docket 6874, Order of 10/16/03 at 11; *2005 EEC Order* at 10–11.

98. Tr. 12/6/04 at 57 (Brown).

99. Tr. 12/6/04 at 56–57 (Brown).

100. GMP Brief at 22.

101. Tr. 12/6/04 at 132–133 (Rosenberg).

102. DPS Brief at 24–25.

103. CLF Brief at 19.

104. Tr. 12/7/04 at 57 (Steinhurst); CLF Brief at 11; Steinhurst supp. surr. pf. at 3.

105. Above, I recommend that the Board reject GMP's proposed efficiency block, which was the mechanism GMP and IBM suggested should be used for determining the portion of IBM's load that would be exempt from the EEC. I presume that GMP and IBM would still seek to have an identifiable portion of the load served under the transmission tariff exempt from the EEC.

advantage of these programs.<sup>106</sup> As CLF's witness testified, customers taking service under the efficiency block also benefit from the system-wide energy efficiency resources acquired with EEC funding.<sup>107</sup> Accordingly, these customers should also pay the EEC to fund those system-wide benefits.

Moreover, none of the parties that advocate extension of the exemption to the efficiency block of the transmission tariff have put forth any cost-based or other justification for exempting any portion of IBM's load from the EEC. The only argument proffered by these parties is that the exemption was created as part of a settlement and its continuation is necessary in order to preserve the status quo. I find this argument unconvincing. The settlement that created the exemption did not presume that the exemption would remain indefinitely. In fact, the Board has affirmatively renewed the exemption each year in setting the EEC.<sup>108</sup> Based upon those Orders, it appears that this continuation has occurred to date without any opposition, so that the Board has not had to address the merits of GMP's proposed exemption previously. Moreover, the Board's decision in Docket 5980 to accept the exemption sets out no rationale except the parties' agreement. Such agreement no longer exists in this case.

GMP's argument that failure to exempt IBM from paying the EEC on the efficiency block would not be revenue neutral is also unpersuasive. There is no evidence that requiring IBM to pay the EEC on its entire load will change the total revenues for GMP. It will, in all likelihood, lead to a small increase in IBM's total costs to GMP and the EEU combined. It may also lead to added revenues for the EEU. However, in examining revenue neutrality of rate designs, the question is whether the rate design is revenue neutral for GMP, not for its customers or for third parties (such as the EEU). Except by mere happenstance, a change in the rate design or the allocation of costs between classes will not be revenue neutral for almost all customers. In fact, for Rate 63, GMP proposes a transition mechanism specifically to address the rate impacts on individual customers. Neither GMP nor IBM has presented any basis for predicating the rate design upon revenue neutrality for IBM but not for any other GMP customer.

---

106. Steinhurst supp. pf. at 3.

107. Steinhurst supp. pf. at 3.

108. See e.g., *Investigation Into the Energy Efficiency Charge for the Year 2004*, Docket 6874, Order of 10/16/03 at 11; *2005 EEC Order* at 10–11.

I recognize the concerns raised by GMP and IBM that failure to extend the exemption to a portion of IBM's load would lead to higher payments from IBM. It is possible that there are good reasons that such higher payments are not appropriate. However, such a rationale has not been presented in this record. The simple fact that some of IBM's load has been exempt before is not a sufficient basis for finding that such an exemption should be made permanent by being incorporated into tariffs.

#### **L. Rate 63 Transition**

GMP's proposed changes to Rate 63 could result in significant increases in charges for certain customers. To address the rate impact, GMP included a transition mechanism for customers whose annual charges are expected to increase by more than 10 percent due to the tariff changes.

The Department supported the phase-in provisions of Rate 63. The Department and GMP also agreed to several proposed modifications to the language of the tariff that provide more detail and to minimize the Company's discretion.<sup>109</sup> The Department and GMP still differ on one clarification that the Department recommends. Specifically, the Department proposes altering the transmission mechanism to make clear that the measurement of the transition impact will exclude the effect of changes in demand and energy consumption. GMP opposes the Department's proposed revision, and asks that the Board approve its proposed tariff language which would explicitly exclude the effects of rate changes when assessing the impact of the change to Rate 63.

Both GMP and the Department have raised valid and convincing arguments. When considering the impact of the Rate 63 changes on individual customers, GMP should focus solely on the effects of changing the rate structure. It should exclude the potential effect of other rate changes. But, as the Department argues, GMP should exclude the impact of changes in demand and energy consumption.<sup>110</sup>

#### **M. Implementation of Rate Design**

---

109. Berry pf. at 2, 8-9; Martin reb. pf. at 2; Berry surr. pf. at 17; tr. 12/6/04 at 116 (Martin).

110. This concept appears to be implicit in the language of the transition adjustment. However, as the Department recommends, it should be made explicit.

GMP requests that the Board allow the Company 180 days after Board approval to implement the proposed tariff. According to GMP, several features of the rate design require extensive software programming. These include the efficiency block,<sup>111</sup> the critical peak rider and the curtailable load rider.<sup>112</sup> In addition, GMP proposes that customers be allowed to continue to take service under any applicable special contracts until they are terminated in accordance with their terms or by mutual agreement.<sup>113</sup> No party opposed implementation consistent with this timeframe.

I find GMP's requests to be reasonable and recommend that the Board accept them.

#### **IV. CONCLUSION**

In large part, GMP's proposed rate design is reasonable. I recommend that the Board accept it, with the modifications that I delineate above.

This Proposal for Decision has been served on all parties to this proceeding in accordance with 3 V.S.A. § 811.

Dated at Montpelier, Vermont, this 5<sup>th</sup> day of July, 2005.

\_\_\_\_\_  
s/George E. Young

George E. Young  
Hearing Officer

---

111. As noted above, I recommend that the Board reject the efficiency block proposal.

112. Brown pf. at 9.

113. Tr. 12/6/04 at 97, 98-99 (Brown).

## **V. BOARD DISCUSSION**

Parties generally recommend approval of the Hearing Officer's Proposal for Decision ("PFD"). Nonetheless, GMP, IBM, the Department, CLF, and AARP each objected to portions of the PFD and ask us to reach different conclusions. After considering these comments, which we address below, we largely accept the Hearing Officer's recommendations.

### **Allocation of Capacity Costs**

GMP disagrees with the Hearing Officer's recommendation concerning the allocation of capacity costs in excess of the marginal cost of capacity. GMP contends that the PFD's recommendation is based upon the incorrect assumption that the entire difference between marginal and embedded capacity costs is attributable to energy savings. According to the Company, some of this difference is attributable to changing market prices for capacity and should be assigned based upon demand.

GMP may be correct that a portion of the capacity costs in excess of the marginal cost of capacity were not incurred solely for the purpose of reducing energy costs. However, GMP has not shown what proportion of these capacity costs are actually incurred for other reasons. More importantly, GMP has not shown why any costs in excess of the marginal cost of capacity are appropriately allocated on the basis of demand rather than energy. Absent such a showing, we are unpersuaded that we should allocate these costs in the manner that GMP proposes. Accordingly, we accept the Hearing Officer's recommendation.

### **GMP's Proposed "Efficiency" Block**

GMP, the Department, and IBM challenge the Hearing Officer's recommendation that the Board not accept GMP's proposed "efficiency" block. Under this proposal, customers with a load factor in excess of 65 percent would receive power under a two-tiered rate structure whereby the power above the 65 percent threshold would be priced at a lower rate than the initial block of power. GMP first contests the Hearing Officer's conclusion that GMP had established no basis for assigning ICAP charges solely to a portion of the energy rate. GMP asserts that the testimony demonstrated that it was appropriate to recover ICAP through energy, rather than demand, charges; the proposed declining-block rate achieved this result and encouraged efficient use of electricity.

GMP also contends that the efficiency block is not a declining-block rate, since it is only available to customers with load factors exceeding 65 percent. This limit, argues GMP, means that the efficiency block is similar to offering reduced prices for off-peak usage.

IBM argues that the PFD misunderstands the purpose of the efficiency block, which it states is to promote the efficient use of electricity. According to IBM, the assignment of ICAP to the initial block was intended to achieve the two-tiered rate structure. IBM also maintains that the Hearing Officer's conclusion that "the declining block rate structure sends the signal to consumers that increased usage costs less" is contrary to the evidence. IBM asserts that the evidence shows that consumers will not alter usage to take advantage of the lower rate in the efficiency block. Finally, IBM states that, if the Board accepts the Hearing Officer's recommendation, it must ensure that the revised rate design produce the amount of revenue for the transmission class that is shown in the cost of service study.

The Department recommends approval of the Efficiency block because it will permit the use of tariffs for special rates that are now provided under special contracts. The Department also contends that the efficiency block, which the Department characterizes as a "cost-based discount," will create an incentive to improve load factor, resulting in more efficient use of electricity.

CLF recommends that the Board accept the PFD. CLF states that the declining-block rate structure of the efficiency block creates an incentive for increased rather than decreased energy use and thus sends the wrong price signal concerning efficiency. CLF contends that parties offered no reasonable justification for the efficiency block.

We understand that GMP may have an interest in increasing the load factor of its customers. To the extent that a higher load-factor has a positive effect upon GMP's overall cost-of-service, such efforts are appropriate. In this case, however, we cannot accept the mechanism by which GMP has elected to encourage higher load factors. GMP's protestations notwithstanding, GMP's proposed efficiency block represents a declining-block rate; power purchased above a 65 percent load factor is charged at a lower rate than the first increment of power. GMP has not shown that there is any cost justification for such a rate structure, particularly in today's power market. To the contrary, the incremental cost of power will almost invariably cost as much, if not more, than previous increments. GMP's proposal would send the

opposite price signal. Moreover, we find no support in the record for the Department's argument that the two-tiered rate structure is cost-based.

We are also not persuaded that GMP's assignment of ICAP to the initial block is reasonable. GMP has produced no rationale for assigning it solely to a portion of the energy use for customers that may benefit from the "efficiency block." Moreover, as the Hearing Officer found, ICAP is largely demand, not energy-related. GMP correctly points out that ICAP varies monthly, so that assignment to the demand charge would make it subject to the demand charge ratchet. For this reason, we accept the Hearing Officer's recommendation that GMP be given the choice between assigning it to the demand charge or to all energy usage.

We recognize that the adoption of the efficiency block would permit IBM to move from a special contract to a tariffed rate. However, neither GMP, IBM, nor the Department have adequately justified the assignment of ICAP exclusively to the initial block, the cost basis for establishing a rate in which incremental usage is priced at a lower rate, or how a declining block rate is consistent with the actual cost of purchasing the power necessary to serve the incremental usage. Although we would prefer to transition from special contracts to tariffs wherever possible, the tariff must still be reasonable; as explained in the PFD and herein, GMP's proposal is not.

For the reasons set out in the PFD and discussed above, this Order adopts the Hearing Officer's recommendations based upon the current evidentiary record. The PFD did not, however, specify how GMP should reallocate the ICAP costs, but rather allowed GMP to either include it in demand charges or spread the costs to all energy rates. GMP would need to submit this analysis in a compliance filing. GMP's choice could have implications for its ability to transition IBM and other large users from special contract rates to tariff-based rates. As we have stated previously, the Board has a strong interest in such a transition. Thus, instead of simply reviewing GMP's compliance filing, we will convene continued technical hearings to consider whether and how to adjust GMP's rate design for the transmission and large C&I classes to reflect the effect of this Order and whether it is possible to adjust that rate design so as to enable GMP to provide service to IBM and other large users through tariffs rather than special contracts. For example, instead of adopting a two-tiered, declining block structure for the transmission class, it may be possible to simply spread the ICAP charges over all energy usage and thus still provide service to IBM exclusively through tariffs. We do not have evidence that would allow us



to conclude that such a result is reasonable; supplemental hearings would allow consideration of this and other alternatives.<sup>114</sup> Parties should have witnesses available who can address these issues and should file prefiled testimony on this issue by November 14, 2005.

#### Energy Efficiency Charge Exemption for IBM

GMP and IBM request that the Board reject the Hearing Officer's recommendation not to exempt the EDA Rider from having to pay the EEC. GMP maintains that continuing the EEC exemption "does not create any discrimination relative to the current, Board-approved exemption" and would avoid an increase in total EEC collections. GMP asserts that the PFD conflicts with prior Board decisions to exempt a portion of IBM's load. GMP argues that, since the Board has previously exempted a portion of IBM's load (in uncontested proceedings), the burden should not be on GMP to demonstrate why such an exemption was appropriate.

IBM contends that the Board should extend the EEC exemption to service under the EDA Rider because this would be consistent with the settlement in Docket 5980, in which the Board established the EEU. IBM maintains that the exemption was a part of the quid pro quo which led to that settlement. IBM also argues that the PFD is incorrect in stating that the settlement did not presume an indefinite exemption for IBM; according to IBM, the settlement was silent on the time period, so that "the presumption was that the exemption would apply as long as the EEC was being collected." Finally, IBM asserts that acceptance of the PFD would lead to a cost increase for IBM that lacks a basis in cost causation.

CLF asks the Board to adopt the Hearing Officer's recommendations. CLF asserts that all customers taking power from GMP, including IBM, benefit from the efficiency resources acquired with EEC funding. CLF further maintains that the only reason offered for the exemption, the fact that it now exists, is not a sound reason to extend it to service under the efficiency block.

The evidence now in the record supports the Hearing Officer's recommendation that we not extend the EEC exemption to service under the "efficiency block." As both IBM and GMP point out, the EEC exemption has existed since the inception of the EEU. It was originally

---

114. This Order approves the PFD, except for two issues upon which we will take additional evidence. We expect that we can resolve those issues well within the 180 days that we allow GMP to implement the rate design, so that the additional evidence will not affect that implementation.

developed as part of the resolution of issues in Docket 5980 and the Board has subsequently renewed the exemption each year when setting the EEU budget. The exemption has always been limited; it applied only to service taken under IBM's special contract. Moreover, in each case, the Board accepted the EEC exemption based upon a stipulated agreement of all of the parties that it was reasonable.

We do not accept GMP's argument that it should not have the burden of demonstrating why the exemption is appropriate. In this proceeding, we are asked to extend the EEC to service under tariffed rates. This is a new mechanism, even though it is intended as largely a replacement of the special contract that now exists, and we must evaluate the merits of applying the EEC exemption service under the tariff. GMP, as the proponent of extending the exemption, bears the burden of proof. Here, we find that GMP has not presented a basis for the exemption. In fact, GMP's and IBM's position is that we should extend the exemption simply because we have granted it previously. This is not sufficient justification.

We are also not persuaded that failure to extend the exemption would result in an increase in costs to IBM that are not supported by principles of cost-causation. First, IBM may face no cost increase; service under the existing special contract, which has been exempt from the EEC, is unaffected. Second, IBM's tariffed rates are established based upon a fully allocated cost study. No party, including IBM, has suggested that the resulting tariffed rates are not cost based. Third, to the extent that IBM experiences a cost increase, it is a result of having to pay the EEC that all ratepayers in Vermont must pay, not a result of GMP's rate design. In the past, IBM has persuaded other parties and the Board that a portion of its load should be exempt from this charge. No party presented evidence here that would support this conclusion.

We are cognizant that IBM's special contract load has been exempt from the EEC in the past and that no party has previously opposed that exemption. We presume that there has been a cost basis for that exemption, even though no party presented it during the hearings in this case. Therefore, in the supplemental hearings that we schedule to consider changes to GMP's rate design, we will also hear evidence on whether the exemption should apply to some portion of IBM's load under tariffed services. Parties should submit prefiled testimony by November 14, 2005, on this issue.

#### Allocation of A&G Expenses

AARP challenges the Hearing Officer's recommendation to accept GMP's methodology for allocating A&G costs. According to AARP, GMP did not demonstrate any basis for its proposed weighting factors (which the Hearing Officer accepts). In the absence of such evidence, AARP maintains that there is no legal basis for accepting these cost allocations because they are not founded on principles of cost causation. Instead, AARP asks that the Board allocate A&G costs on the basis of class energy consumption or class revenues.

By contrast, IBM asserts that the PFD's allocation of A&G costs is "supported by the evidence and well reasoned" and recommends that the Board accept it. IBM argues that there is no correlation between A&G costs and either energy usage or class revenue. In addition, IBM agrees with the Hearing Officer's conclusion that the bulk of the A&G costs are related to customer service and accounting functions, which are largely driven by the number of customers (rather than by class revenue or energy consumption).

We accept the Hearing Officer's recommendation. Contrary to AARP's assertion, the PFD is supported by cost-causation principles. The evidence showed that the majority of the A&G costs are related to customer service and accounting roles. These costs largely vary with the number of customers. Thus, it is appropriate to allocate the costs among the customer classes using measures that are driven by the number of customers. For similar reasons, we cannot accept AARP's proposal that we allocate A&G costs on the basis of either class energy consumption or class revenues. These allocation methodologies bear little relationship to the number of customers in each class.

AARP is correct that GMP did not produce a specific study showing that its weighting factors for the commercial and industrial and transmission classes were appropriate. However, we agree with the Hearing Officer that the weighting factors proposed by GMP are reasonable estimates, particularly since no party presented alternative weighting factors.

#### Approval of Special Contracts

The Department asks us to approve GMP's proposed EDA Rider that would replace the current economic development agreement process using special contracts. The Department asserts that the Rider is a "nondiscriminatory tariffed service so Board approval is no longer necessary." In addition, the Department points to various checks that make Board approval unnecessary, including certification of new jobs by a regional development corporation and the

fact that the Department must approve a potential customer. The Department states that continuing Board review would defeat the purpose of moving to a Rider approach. GMP supported the PFD on this issue.

CLF recommends that we adopt the Hearing Officer's recommendations. According to CLF, review by the Board is needed to reduce the potential for discriminatory treatment or unjustified rate discounts.

We are sympathetic to the concerns expressed by the Department. As we have stated on numerous occasions, we strongly encourage utilities to replace the existing special contracts with non-discriminatory tariffs to the extent possible. GMP's implementation of the riders represents a positive step in this direction.

We agree, however, with the Hearing Officer's recommendations concerning the proposed EDA Rider. The purpose of a tariff is to have a clearly delineated set of rates and other terms and conditions that are both transparent and non-discriminatory. Both the Company and customer should be able to look at the tariff and know, based upon the customer's particular circumstances, what the rates will be. GMP's EDA Rider did not meet this standard. Instead, the calculation of the baseline for future economic development arrangements would allow GMP substantial discretion. The tariff also set no standard for commitments on job growth, but instead relied on certification from economic development agencies.

Moreover, the tariff itself is not self-implementing, but requires that the Department approve any economic development agreement. Collectively, these provisions mean that rather than a transparent tariff, GMP's EDA Rider is to some degree a case-by-case arrangement in which the Department (and regional economic development agencies) rather than the Board will approve the specific arrangements that GMP proposes. No party has presented any justification for us to essentially delegate our authority as the EDA Rider contemplates.

We continue to encourage GMP to incorporate its EDA program into tariffs. But any tariff must clearly outline all the applicable criteria for eligibility and for calculating discounts.

#### Customer Charge

In the past, we have generally attempted to set energy rates as close as possible to the marginal cost of energy. GMP and the Department correctly point out that lowering the customer charge will lead to an increase in the energy rate. This will have the effect of moving that rate

farther away from the marginal cost of energy. In addition, the Board has had the policy of setting rates, to the extent possible based upon cost. The Hearing Officer recommends that we vary from that approach because of equity concerns, namely that rates for residential customers are set to collect 80 percent of the customer-related costs, whereas rates for other customer classes collect significantly less.

GMP and the Department both ask that the Board not accept the Hearing Officer's recommendation to reduce the customer charge. GMP argues that the PFD is inconsistent with the Board's policy of setting energy prices at marginal costs, since a reduction in the customer charge will necessitate an increase to energy prices. In addition, GMP asserts that reducing the customer charge moves the charge away from cost-based rates as it reduces the proportion of customer-related costs recovered through the charge. GMP also states that the PFD sought to equalize contributions across rate classes for one cost element without considering variations for other cost elements. Finally, GMP states that, even if the Board accepted the Hearing Officer's proposal to seek greater equality in customer charge contributions, the Board should add transformer costs to the residential customer class when comparing rates, which would result in a customer charge of \$9.45 rather than \$8.76. GMP asserts that transformer costs "could be considered as an element of customer costs."

The Department contends that we should reject the Hearing Officer's recommendation because it moves GMP farther away from cost-based rates. In addition, the Department asserts that there is no generally accepted rate design principle that says that all classes have to recover costs in the same manner. Moreover, the Department takes the position that a different cost allocation between classes is not necessarily discriminatory; different treatment may be appropriate if facts support the differences.

CLF recommends that we adopt the Hearing Officer's recommendations, which it argues provides a fairer rate for residential customers compared with other classes. CLF also argues that the reduced customer charge will allow for a reasonable collection of GMP's embedded costs. In addition, CLF maintains that the reduced customer charge supports energy efficiency since the resulting increase in the energy charge sends price signals to encourage the efficient use of electricity.

AARP also supports adoption of the PFD. AARP suggests that, in addition to the reasons cited in the PFD, the Board should consider the fact that GMP's customer charge is high relative

to other utilities in the region, is regressive, is unfair to low income consumers, and discourages conservation.

We find that, on balance, the recommendations set out in the PFD are reasonable and we adopt them. As the Department argues, it is not necessary that we set rates so that the customer charge collects a similar percentage of customer-related costs from each class. However, GMP has presented no reasoned basis for the large disparity between the proportion of these costs recovered in the customer charge between classes. In the absence of such an explanation, we cannot find the different treatment of the rate classes to be acceptable.

We recognize that the result of adopting the Hearing Officer's recommendations is that specific rate elements in the residential customer class may be diverging farther from their embedded costs. GMP already finds this divergence to be reasonable for other customer classes, as evidenced by the proposed customer charges for those classes. For example, only 27 percent of customer-related costs for commercial and industrial customers are recovered from the customer charge. In light of these disparities, we do not understand why the residential customers should be expected to have a higher charge simply because it is closer to the embedded cost of the particular rate elements. Moreover, the Department's analysis focuses on the embedded costs of service; GMP presented no study showing the marginal costs for the customer-related functions.

It also is important to note that while setting energy prices at marginal cost in principle encourages overall efficiency, the actual application does not accurately accomplish that goal. The energy price in GMP's rates is the average marginal cost. At any given time, GMP's true marginal cost may be less than the average or significantly greater. The result is that consumers are not receiving the efficient price signals that the marginal cost-based pricing was intended to achieve (particularly in today's energy markets). Weighing the benefits of the imperfect signal that marginal cost-based pricing provides against the fairness issues discussed in the PFD, we cannot conclude that the extremely minor increase in the energy price that results from the decreased customer charge is unreasonable.

We are also unpersuaded by GMP's argument that we should now include transformer costs in the definition of customer-related costs. GMP's own cost study did not include these costs nor did its calculation of the customer charge.

Clarification Issues

GMP asks that the Board clarify that compliance tariffs will reflect not only the changes ordered by the Board in this docket, but also the 1.9 percent revenue increase approved by the Board earlier this year. We agree.

GMP also asked the Board to clarify that existing special contracts remain in effect and are not altered by the adoption of revised tariffs. Thus, IBM would be able to continue to take service under the EDA that we approved in Docket 6867. The Hearing Officer made this clear in the PFD<sup>115</sup> and we accept that recommendation.

Third, GMP asks that we clarify that the benchmark for the Rate 63 transition mechanism is the 2002 billing determinants and the rates in effect as of the March 26, 2004, filing. This clarification would mean that the rate impact would not incorporate the 1.9 percent rate increase that took effect in January 2005. This is consistent with the Hearing Officer's recommendation and the parties' proposal and we accept it.

**VI. ORDER**

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The findings and recommendations of the Hearing Officer are accepted, except for the Hearing Officer's recommendations concerning the Energy Efficiency Charge Exemption on which we will hold further hearings.
2. Green Mountain Power Corporation's rate design, as modified herein, is approved, except for the Energy Efficiency Charge Exemption and the final rate design to replace the "efficiency block" for the Rate 63 and Transmission rate classes on which we will hold further hearings.
3. The Board will hold an additional hearing on November 17, 2005, commencing at 2:30 p.m., to consider the Energy Efficiency Charge Exemption and the final rate design for Rate 63 and the Transmission class. Parties should prefile testimony on these issues by November 14, 2005.

---

115. PFD at 38–39.

4. Within 30 days of the Order resolving the Energy Efficiency Charge Exemption and the final rate design for Rate 63 and the Transmission class, Green Mountain Power Corporation shall file revised tariffs consistent with the Board's Orders for Board review and approval.

5. Green Mountain Power Corporation shall, within one year of the date of this Order, file a report with the Board detailing the results of its evaluation of the potential for controlling small loads and recommending any tariff changes that may be appropriate to control such loads.

Dated at Montpelier, Vermont, this 21<sup>st</sup> day of October, 2005.

_____	)	
_____	)	PUBLIC SERVICE
_____	)	
s/David C. Coen	)	BOARD
_____	)	
_____	)	OF VERMONT
s/John D. Burke	)	

OFFICE OF THE CLERK

FILED: October 21, 2005

ATTEST: s/Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: Clerk@psb.state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.*